

Brown Speed Engineering VQ35DE Swap Kit for B13/B14 Nissan Sentra.



Thank for your purchase of the B13/B14, VQ35de Swap kit.

Please note that this is not a beginner project. This swap does require some knowledge base on engine electronics and parts.

Tools:

Extension cord

Engine hoist

Torque wrench

Pry-Bar

Metric & standard sockets (3/8-1/2”)

Metric & Standard wrenches

Floor Jack

1 Ton jack stands

Grinder

Eye Protection

Ear protection

Having all your parts to complete the swap is a must. This will make the swap process move along smoothly and quickly.

First off you must have your engine (Vq35de) from a Maxima 2002 and up or an Altima/Quest 2004 and up.

*Note: Engine must be a front wheel drive and only from the cars listed above.

*Note: Get an engine complete with accessories.

Transmission from a Maxima 2002 – 2006 or from a Sentra SER 2004 – 2006. *Note: If using the Trans from a Sentra you’ll have to swap the bell housing. (Better synchronizers and ratio are found in 2006) You will also need the axles and hubs from a 2004 SER Sentra.

For hubs, I used the Sentra B15 hubs and spindle assembly with brakes and just re-drilled the hubs and rotors for my lug pattern. Rims will have to be opened up some for the center flange.

Reservoir Part #30617-5M000

Clutch Master Part # 30610-5M007

Clutch Master Supply Hose from Reservoir Part # 30856-5M002

U-clip Part # 36406-7B405

Shifter Assembly Part # 34101-6Z900

Shift cables Part # 34413-6Z900 set.

All the above parts are from 2004 Spec-V Sentra SE-R

04 Maxima Bell housing Part # 30400-8H812

02 Axle bracket Part # 39780-31U00

Ga16de Eng mount for driver side Trans mount Part # 11210-0M600

Wiring harness from a 2004 Maxima, 350Z, or Altima

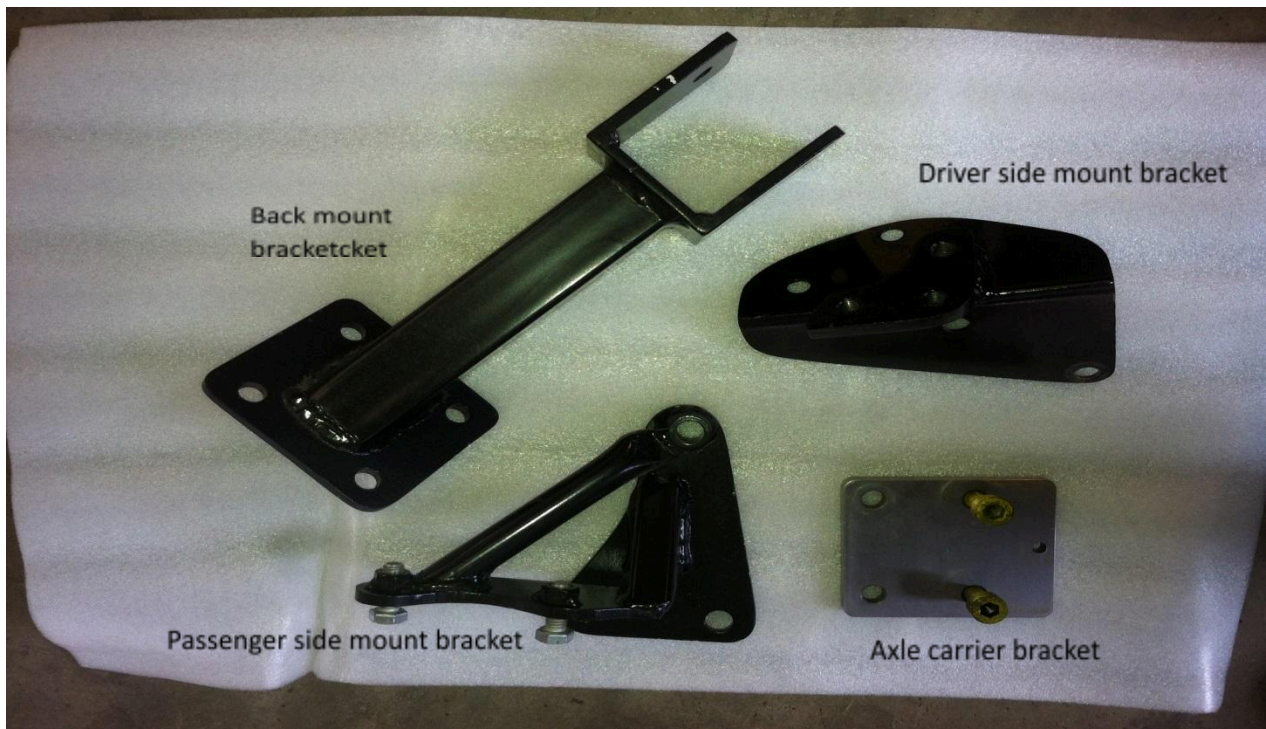
Accelerator pedal 2004 Maxima

ECU – 2004 Maxima, Altima, or 350Z. (I recommend a 350Z ECU for better performance)

You can send the ECU to an Uprev Pro Tuner for a re-flash. This will delete the NATS (Nissan Anti-Theft System) and give you the ability to tune the ECU.

Power steering line

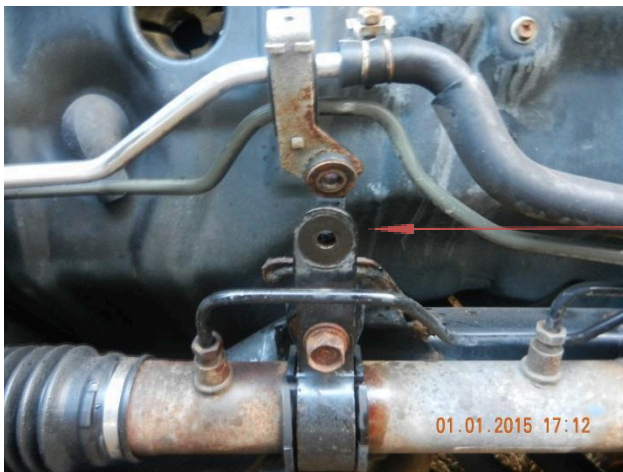
VQ swap kit for Sentra b13-b14



1. Disconnect battery.
2. Jack car up and make sure it's safely supported.
3. Drain coolant, engine oil and transmission fluid.
4. Remove the SR or GA engine wiring harness and ECU. ***Note: Keep the alternator harness wiring.**
5. Clean up the engine bay!
6. Remove the driver's side transmission mount bracket and battery tray.
7. On the passenger side the power steering line bracket needs to be bent back 30° towards the fire wall.



Remove bolt shown here



Bend here back 30° and reinstall line support and bolt.

8. Remove A/C condenser and A/C lines. ****Will not be put back.**
9. Now that you have completed all this, you should have your VQ35de engine and transmission together.

10. Note: Before install make sure that the Power Steering bracket for the VQ35De is modified in the following manner.



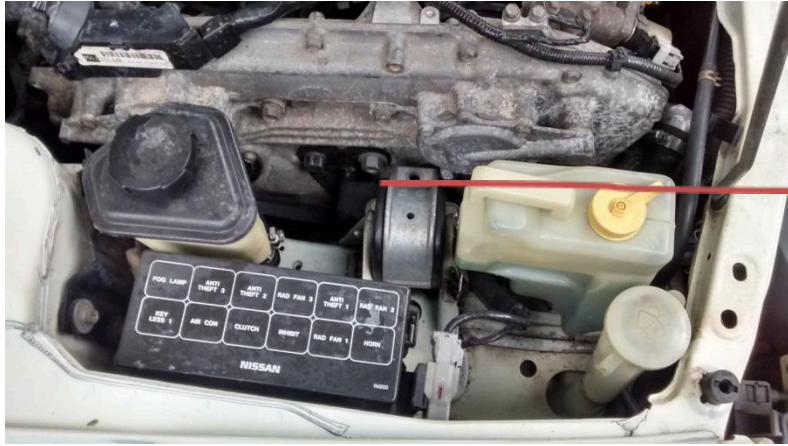


Should look like this after cutting.

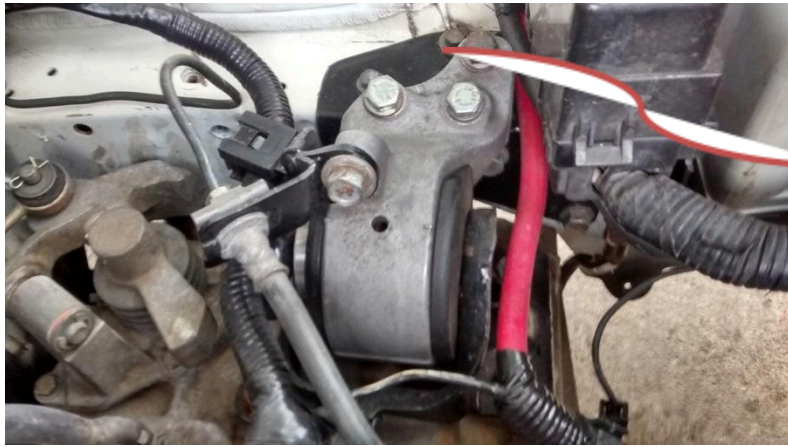
11. Reinstall power steering bracket and adjust belt tension by using a pry bar.
12. Now you are ready to install your engine
13. Engine installation should be done from the bottom.



VQ35de fitted in its new home.



Passenger side mount bracket



Driver side mount bracket



Back mount bracket



2002 maxima axle bracket



BSE axle
bracket

Any revisions of future developments will be made accordingly.

Thanks,

Brown Speed Engineering